Rhodora

76

[VOL. 58

long; siliques erect, flat, without raised margins, glabrous, 1–1.5 cm. long, 3–4 mm. wide, rounded below, obtuse above, nearly sessile, gynophore less than 0.5 mm. long; styles slender, broadening at base, 1–1.5 mm. long; ovules 3–6 in each loculus, funiculi free, ca. 1 mm. long; seeds flat, nearly orbicular, dark brown, 3–3.5 mm. broad, surface uniformly reticulate, winged, funicular notch deeper than wide; wing not differentiated from body of seed, ca. 0.5 mm. wide; embryo straight, radicle not recurved against the cotyledons.

Herba annua plerumque scaposa; foliis omnibus radicalibus petiolatis lyrato-pinnatifidis lobatis glabris 2–6(8) cm. longis; scapis axillaribus erectis glabris tenuibus 4–8 cm. longis nudis plerumque 1-floribus; sepalis glabris oblongis 3.5–4.5 mm. longis; petalis spathulatis emarginatis lilacinis vel albescentibus 8–10 mm. longis, 3–3.5 mm. latis; siliquis erectis oblongis compresso-planis glabris 1–1.5 cm. longis, 3–4 mm. latis; valvis enervatis; stylis tenuibus 1–1.5 mm. longis; loculis 3–6-ovulatis; seminibus uniseriatis orbiculatis planis brunneis alatis 3–3.5 mm. latis.

Type in the Gray Herbarium, collected 1 mile north of the North Fork of the Duck River, southeast of Unionville, Bedford County, Tennessee, April 3, 1955, *Reed C. Rollins 5535*.

Other specimens studied (all in the Gray Herbarium):—**Tennessee:** cedar glade, 2 miles north of Green Hill, Wilson Co., Rollins 5310; cedar glades, Vesta, Wilson Co., Svenson 7748; cedar barrens south of Nashville, Davidson Co., Shanks & Sharp 383 (Exsic. Gray. 1051); cedar glades west of Couchville Pike, Davidson Co., Svenson 7715; La Vergne, Davidson Co., April 18, 1882, A. Gattinger; mossy creek bank, 2 miles east of Nolensville, Williamson Co., Rollins 5512; 4 miles southeast of Kirkland, Rutherford Co., Rollins 5520; 5 miles southeast of Kirkland, Rollins 5524; cedar glade, 3 miles southeast of Eagleville, Rutherford Co., Rollins 5529; 1 mile north of Chapel Hill, Marshall Co., R. C. & D. Rollins 5216; 3 miles south of Chapel Hill, R. C. & D. Rollins 5219; open glade, 3 miles east of Lewisburg, Marshall Co., Rollins 5540; east of Columbia in cedar barrens, north of Duck River, Maury Co., Sharp, Felix & Adams 11094; northwest of Shelbyville, Bedford Co., Sharp, Felix & Adams 11244.

A NEW FORM OF NUPHAR MICROPHYLLUM FROM MINNESOTA.— N. microphyllum (Pers.) Fern. f. multisepalum, f. nov., sepalis super-numerariis, variabilibus in numeris (2–9). The type collection was made from a colony situated in an opening within a wild rice field (Zizania aquatica) along the east shore of Vermilion River about one-half mile upstream from the Gold Mine Camp, Sec. 6, T. 17, R. 66, July 21, 1955, O. Lakela 18945 (Type in Herb. Univ. of Minn., Duluth Branch). This striking variant differs from N. microphyllum f. micro-

phyllum in that it possesses supernumerary sepals variable in respect to number (2-9), in addition to the characteristic 5.

1956] Lakela,—A New Form of Nuphar microphyllum 77

Flowers with a total number of 13 sepals predominate, the minimum being 7, and the maximum 14.

The flowers, seemingly larger than those of the typical form, measured 20-24 mm. in diameter at full anthesis before drying. The additional sepals, golden yellow in color, petaloid in texture are somewhat smaller than the outer sepals to whose concavity they conform.

The plants were growing in a more or less uniform colony throughout the opening about 300 ft. long and 5-20 ft. wide, separated from mid-stream by wild rice fields that flank each bank of the river through a distance of 6 miles above the gorge below which the river ultimately empties into Crane Lake. The upstream end of the opening was colonized by the typical form, with a few plants of N. rubrodiscum Morong. Farther up and down the stream, N. variegatum Engelm. occurred in large colonies. Other aquatics in the association included *Ceratophyllum demersum* L., in abundance, *Potamogeton natans* L. and Megalodonta Beckii (Torr.) Greene.

The specimens collected are fragmentary due to the difficulties of managing the drifting boat in the current that was being activated by winds. The openings in the wild rice fields are really pools of greater water-depth, too deep for the growth of the rice plants. An effort was made to collect each plant as a whole. At least two were uprooted with a pitchfork intact with a rhizome, peduncles, submersed and floating leaves. However by subsequent handling of the tangled petioles and peduncles they became severed, but the parts were carefully pressed together. One of the plants is the type; the other, an isotype, is deposited in the Herbarium of the University of Minnesota at Minneapolis.

Topotype material was collected on Aug. 4, 1955, O. Lakela & Mary I. Elwell 19075. These specimens are also fragmentary consisting of basal leaves with young rhizomes, separate floating leaves, and flowering and fruiting peduncles. At this date, due to flooding, many flowers were decaying without fruiting and most floating leaves were riddled by insects.

The typical form of the species is frequently encountered in northeastern Minnesota. In St. Louis Co., from the southern extremity to the Canadian border lakes, it inhabits, with its

Rhodora [Vol. 58

congeners, the quiet waters of many lakes and streams. In contrast, N. microphyllum f. multisepalum is thus far known only from the single location given above.

78

Gratitude is expressed to the Graduate School of the University of Minnesota for aid in research on the flora of St. Louis Co.—Olga Lakela, UNIVERSITY OF MINNESOTA, DULUTH BRANCH.

Volume 58, no. 686, including pages 31-50, was issued 20 March, 1956.